What is claimed is:

1. A planographic printing plate comprising: a recording layer writable by exposure to an infrared laser, said recording layer provided on a support, the support including an aluminum substrate comprising a roughened surface including an inorganic oxidation coating disposed thereon, with the density of said inorganic oxidation coating being from 1000 to 3200 kilograms/m^3.

2. A planographic printing plate comprising a recording layer writable by exposure to an infrared laser, said recording layer provided on a support, the support including an aluminum substrate comprising a roughened surface including an anodic oxidation coating disposed thereon, and the anodic oxidation coating being at least one of:

(i) density from 1000 kg/m^3 to 3200 kg/m^3, or

(ii) micropores exposed on the surface of anodic oxidation coating including diameters of not more than 15 nm, and a contact angle of a non-image area after a developing process is not more than 20°, the micropores including a vacancy ratio of in percent as follows:

vacancy ratio = (1-(density of anodic oxide coating/3.98))$\times$100

wherein density of anodic oxidation coating (g/cm^3) = weight of anodic oxidation coating per unit area/thickness of

the anodic oxide coating and the vacancy ratio is from 20% to 70%.

3. The planographic printing plate of claim 2, wherein the support further comprises a sealing treatment applied on the anodic oxidation coating.

4. The planographic printing plate of claim 2, wherein the anodic oxidation coating has a surface area weight of 0.5 g/m^2 to 20 g/m^2.

5. The planographic printing plate of claim 3, wherein the anodic oxidation coating has a surface area weight of 0.5 g/m^2 to 20 g/m^2.

6. The planographic printing plate of claim 2, wherein the recording layer comprises a thermal type photosensitive layer directly writable by exposure to an infrared laser, the thermal type photosensitive layer including infrared absorbing agent(s) and polymer(s) insoluble in water and soluble in alkaline water, with the solubility of an exposed portion of the thermal type photosensitive layer with respect to an alkali developer changing.

7. The planographic printing plate of claim 3, wherein the recording layer comprises a thermal type photosensitive layer directly writable by exposure to an infrared laser, the thermal type photosensitive layer including infrared absorbing agent(s) and polymer(s) insoluble in water and soluble in

alkaline water, with the solubility of an exposed portion of the thermal type photosensitive layer with respect to an alkali developer changing.

8. The planographic printing plate of claim 4, wherein the recording layer comprises a thermal type photosensitive layer directly writable by exposure to an infrared laser, the thermal type photosensitive layer including infrared absorbing agent(s) and polymer(s) insoluble in water and soluble in alkaline water, with the solubility of an exposed portion of the thermal type photosensitive layer with respect to an alkali developer changing.

9. The planographic printing plate of claim 5, wherein the recording layer comprises a thermal type photosensitive layer directly writable by exposure to an infrared laser, the thermal type photosensitive layer including infrared absorbing agent(s) and polymer(s) insoluble in water and soluble in alkaline water, with the solubility of an exposed portion of the thermal type photosensitive layer with respect to an alkali developer changing.

10. The planographic printing plate of claim 6, wherein the recording layer comprises a negative recording layer, the negative recording layer including compounds that release an acid or radical by an infrared absorbing agent or by heat and compounds that form crosslinks or polymerize due to the acid

or radical.

11. The planographic printing plate of claim 7, wherein the recording layer comprises a negative recording layer, the negative recording layer including compounds that release an acid or radical by an infrared absorbing agent or by heat and compounds that form crosslinks or polymerize due to the acid or radical.

12. The planographic printing plate of claim 8, wherein the recording layer comprises a negative recording layer, the negative recording layer including compounds that release an acid or radical by an infrared absorbing agent or by heat and compounds that form crosslinks or polymerize due to the acid or radical.

13. The planographic printing plate of claim 9, wherein the recording layer comprises a negative recording layer, the negative recording layer including compounds that release an acid or radical by an infrared absorbing agent or by heat and compounds that form crosslinks or polymerize due to the acid or radical.

14. The planographic printing plate of claim 6, wherein the recording layer comprises a positive recording layer, the positive recording layer including compounds that become soluble in an alkaline aqueous solution by bonds thereof decomposing by an infrared absorbing agent or by heat.

15. The planographic printing plate of claim 7, wherein the recording layer comprises a positive recording layer, the positive recording layer including compounds that become soluble in an alkaline aqueous solution by bonds thereof decomposing by an infrared absorbing agent or by heat.

16. The planographic printing plate of claim 8, wherein the recording layer comprises a positive recording layer, the positive recording layer including compounds that become soluble in an alkaline aqueous solution by bonds thereof decomposing by an infrared absorbing agent or by heat.

17. The planographic printing plate of claim 9, wherein the recording layer comprises a positive recording layer, the positive recording layer including compounds that become soluble in an alkaline aqueous solution by bonds thereof decomposing by an infrared absorbing agent or by heat.

18. The planographic printing plate of claim 6, wherein the polymer(s) have at least one acidic group selected from the following:

(1) phenol group (-Ar-OH);

(2) sulfonamide group ($-SO_2NH-R$);

(3) substituted sulfonamides group ($-SO_2NHCOR$, $-SO_2NHSO_2R$, $-CONHSO_2R$);

(4) carboxylic group ($-CO_2H$);

(5) sulfonic group ($-SO_3H$); and

(6) phosphoric group ($-OPO_3H_2$);

wherein Ar represents di-functional aryl connecting group that may have a substituent, and R represents a hydrocarbon group that may have a substituent.

19. The planographic printing plate of claim 7, wherein the polymer(s) have at least one acidic group selected from the following:

(1) phenol group (-Ar-OH);

(2) sulfonamide group ($-SO_2NH-R$);

(3) substituted sulfonamides group ($-SO_2NHCOR$, $-SO_2NHSO_2R$, $-CONHSO_2R$);

(4) carboxylic group ($-CO_2H$);

(5) sulfonic group ($-SO_3H$); and

(6) phosphoric group ($-OPO_3H_2$);

wherein Ar represents di-functional aryl connecting group that may have a substituent, and R represents a hydrocarbon group that may have a substituent.

20. The planographic printing plate of claim 8, wherein the polymer(s) have at least one acidic group selected from the following:

(1) phenol group (-Ar-OH);

(2) sulfonamide group ($-SO_2NH-R$);

(3) substituted sulfonamides group ($-SO_2NHCOR$, $-SO_2NHSO_2R$, $-CONHSO_2R$);

(4) carboxylic group ($-CO_2H$);

(5) sulfonic group ($-SO_3H$); and

(6) phosphoric group ($-OPO_3H_2$);

wherein Ar represents di-functional aryl connecting group that may have a substituent, and R represents a hydrocarbon group that may have a substituent.

21. The planographic printing plate of claim 9, wherein the polymer(s) have at least one acidic group selected from the following:

(1) phenol group (-Ar-OH);

(2) sulfonamide group ($-SO_2NH-R$);

(3) substituted sulfonamides group ($-SO_2NHCOR$, $-SO_2NHSO_2R$, $-CONHSO_2R$);

(4) carboxylic group ($-CO_2H$);

(5) sulfonic group ($-SO_3H$); and

(6) phosphoric group ($-OPO_3H_2$);

wherein Ar represents di-functional aryl connecting group that may have a substituent, and R represents a hydrocarbon group that may have a substituent.